Disaster Memories
and other thoughts on the Fukushima nuclear reactors, the Military Industrial Complex, the Ainu, and National Sovereignty

Hiroshi Fukurai

It is the irony of ironies that the only country on Earth ever attacked by the nuclear bomb is now facing the peril of massive radioactive contamination from another nuclear crisis. The country bombed by both the Enola Gay and Bockscar, the country that experienced deadly "black rain" and massive human annihilation at the end of WWII, is now confronted not only by the outcome of the natural catastrophes caused by earthquakes and tsunami waves, but also the man-made disaster of massive radiation leaks from nuclear reactors in Fukushima.

As of today, nearly 30,000 people are reported dead or missing due to the destruction caused by the earthquake and tidal waves. Most of these deaths and structural damages occurred in the Prefecture of Miyagi, the prefecture being Japan's geopolitical jurisdiction equivalent to statehood in the United States. On the other hand, the nuclear disaster in the nuclear plant in Fukushima, south of Miyagi, has yet to kill anyone. Nonetheless, the massive radiation leaks will threaten the lives of tens of millions of people in the northern and central region of Japan for many years to come.

Natori City, tidal waves, and the destruction of local farming and fishing traditions

I was born and raised in Sendai and lived in the Haranomachi Ward of Sendai City. My family included my parents, grandmother on my mother's side, and younger sister. When I turned fifteen, my father, Yoshikichi Fukurai, built a new house in Natori, a neighboring rural city located in the south of Sendai. Natori was still a small town with a population of barely 30,000 people. The house was built in the middle of the rice-paddy fields and we were still able to see locomotives from our house.

Back row *left to right*
Kaori Sakurai, eldest daughter of author's cousin, Tsutomu Sakurai

Yoko Sakurai, wife of author's cousin, who was trapped on the second floor by the tsunami and rescued next day

Yoshiko Kamo, author's father's youngest sister who lived with his father in his house for a month or so

Rie Sakurai, second oldest daughter of author's cousin

Mieko Sakurai, mother of author's cousin, his father's younger sister who is currently living with his father

Yoshikichi Fukurai, author's father

Front row *left to right*
Takato Sakurai, author's cousin's youngest son

Yuki Fukurai
author's eldest son

Haruka Fukurai, author's youngest daughter

Mihoka Fukurai, author's eldest daughter

My sister and her family still live in Sendai. It is truly impossible to describe the sadness I felt when I first saw pictures of destroyed landmarks and buildings in many places I know personally. I still have many friends in Sendai. As of today, I have yet to hear from some of my closest friends and old classmates from elementary and junior high school.

My father now lives in Natori City, just south of Sendai. This sleepy town was hit hard by tsunami waves that destroyed my cousin's house and his entire business, including his family farms. My father's house was, fortunately, spared. However, four cousins in Natori were not as fortunate. Hiromichi Sakurai and his wife were found dead in their car. They were on their way to Natori to pick up their elderly parents who lived near the Natori beach. The car was swallowed by the tidal wave and they drowned together inside it, and the elderly parents were found dead after the seawater subsided.

Geographically, Natori is surrounded by the Natori River, which extends from the north to the west, and another river, Masuda, which runs from the north to the south. Natori, in other words, is located in the middle of the fertile deltas created by both the Natori and Masuda rivers. The samurai feudal lord named Masamune Date moved to the area, built the castle, and claimed its lordship in 1601. Natori then became one of the major granaries of the Date feudal lord.

After the Meiji Restoration in 1868, the feudal system was abolished and replaced by the new modern government that introduced the western conception of township and cities. The town of Natori was originally established in 1955 by annexing two small towns and four remote villages, and it received city status in 1958.

After we claimed our Natori residence in 1970, the city began to grow. Today it holds more than 70,000 people. It is often cited as a "bed-town" of Sendai City, which is a municipality with a population of one million, the largest in northern Japan. Many residents of Natori commute to Sendai to work or to attend schools. Natori also has a large agricultural farmland. Nonetheless, only seven percent of Natori residents continue to work in agricultural sectors, while some are also employed in fishing industries.

My cousin, Tsutomu Sakurai, lived in the coastal Kitagama Ward of Natori, and came to be known as the last full-time agricultural worker in the entire Prefecture of Miyagi. Right after he graduated from the Miyagi Agricultural High School, more than thirty years ago, he decided he would become a full-time farmer and take over his father's agricultural business. The local newspaper ran a big story about him, because becoming a full-time farmer and taking over a traditional agricultural business was not considered a popular thing to do among many Japanese youths at that time.

The name Natori has its origin in an indigenous word, *Nutatori,* representing the meaning of wetlands. Until quite recently, the indigenous people of Japan inhabited much of the northeast region of Honshu, the

largest of four major islands that constitute most of Japan's geographic territory. These indigenous people were called *Ebishi,* more widely known as Ainu. Despite many years of governmental discrimination against the Ainu, the Japanese government never publicly acknowledged the unique history or ancestral heritage of the Ainu. The Japanese government also insisted on its denials of any predatory policies aimed against the territorial rights of the Ainu people.

Since the Japanese government has stressed the importance of ethnic homogeneity and public solidarity under the reign of the imperial family, the presence of the Ainu (or any other ethnic minority) has not until very recently been recognized. Any open, public discourse about ethnic minorities and their histories has also been considered a taboo. The human rights movement to support the Ainu people, their identity, and national heritage has been largely silenced by the repressive public policies of both regional governments and national bureaucratic institutions. Nonetheless, because of a strong grassroots movement and prominent legal cases brought on behalf of the Ainu to reclaim their indigenous land rights in Hokkaido, the Japanese government was finally forced to acknowledge in 2008 that the Ainu people were indeed the original indigenous inhabitants of the islands of Japan.

Even when I was small, we had always known unique folk stories and local tales about the indigenous people living in nearby mountains. Many of them had blue and green eyes, one of the distinct physical characteristics of Ainu people. The fact that I was born with very distinctly light colored pupils may reflect some of the physiological residues of Ainu blood that my family inherited from our ancestors. Indeed, my family's ancestral roots, from both sides, are firmly grounded in this region for many centuries.

The indigenous people had called the land of Natori a wetland, and sure enough the city represents a territorial municipality that is largely flat and thus suitable for the agricultural cultivation which was promoted by many settlers, one of the reasons that the Ainu, a fishing and hunting people, were forcefully driven out of this area into the mountains. Just like with the colonial predation of many indigenous populations in North America by the British forces or in Mesoamerica by the Spaniards, Ainu people who resisted colonial policies were eradicated and some who accepted new ways of life had been forcefully made into farmers and assimilated into the settler-state social system imposed by new migrant populations in the region. I sometimes wonder what my Ainu ancestors went through in the colonial policies of forced assimilation imposed upon their ways of life.

First recorded in Japanese history as a distinct group of inhabitants in 660 A.D., the Ainu had long developed trading contacts with various neighboring people in different regions, including settler populations (or the Wajin) to the south, the Manchurians to the west, the Orok and Nivkh to the north in Sakhalin, which is an island north of Hokkaido, and the Itenmi in Kamchatka Peninsula (part of Russia) to the east and northeast.

As the expansion of Wajin populations began to incorporate the Ainu into its nation-state project, many resisted such an imposition of colonial policies from the south. There were three noted wars between the Ainu and the settler populations of the Japanese islands. The most significant conflict was the Shakushain War in 1669, as a war of independence against the powerful Japanese authority, which led to the defeat of Ainu leader Shakushain in 1672. Nonetheless, he later became a famous Ainu cultural hero.

Today, the Japanese governmental census reveals that there are only 25,000 people who identify as Ainu, most of whom reside in the northern island of Hokkaido. Other studies indicate that the population of Ainu is much greater than what the official statistics indicate, because many people still refuse to identify themselves as Ainu, fearing discrimination against their families. I always wondered what would happen if I reclaimed my remote ancestral connection to the Ainu people and identified myself as an Ainu who once lived in Natori and adjacent areas for thousands of years. Using the one-drop-of-blood theory, my family members who live in California are all Ainu descendants.

Before the settler populations moved into Natori, there were no known distinct permanent residential areas near the coast, nor any substantial rice-paddy fields to grow the huge amount of rice necessary to feed the settler population. Ainu had no huge boats to engage in industrial fishing and no international airport to transport people or commodities.

I wonder, if people had followed the indigenous ways of the Ainu, how many would have been affected by the recent earthquake and/or tsunami? How much do the naturally occurring seismic changes and oceanic activities affect the populations who follow the indigenous ways? I am not romanticizing the Ainu culture, but it still makes me wonder how much our blind submission to the western conception of civilization led to the loss of human lives in the last earthquake and tsunami disaster.

In the city named after the Ainu term for wetlands, my father's current house is located nearly five miles from the shore of the Pacific Ocean, but its foundation lies only five meters above sea level. The large flat areas of fertile ground allow the huge rice fields to extend on the west side of my father's house. I've always liked to run through the open paths between the rice fields since my adolescent years. I studied metallurgical engineering at the National College of Technology in Miyagi, which is located on top of Medeshima Mountain on the western side of Natori City. I watched and observed the rice field from my building on the college campus for five years. When we pay pilgrimage to my father's house and stay there for many weeks every summer, I still love to run or walk through the rice fields with my children and wife.

Nonetheless, for many Natori residents, the flatness of this geographical landscape was a curse, allowing the powerful tidal waves into the interior of the city, destroying many farmlands on the east side, carrying with the waves many automobiles, farm equipment, and residential buildings, and pushing

them to the higher ground on the western side of the city. Tsunami waves also engulfed the entirety of the Sendai International Airport and stopped just short of reaching the Tohoku Japan Railway track, which is only half a mile from my father's house.

I need to mention my cousin now. I literally grew up with my cousin, Tsutomu Sakurai, and his little brother, Tsuyoshi, both of whom were born and raised in Natori. Even when my family lived in Sendai, I visited my cousin's family every summer and spent much time playing, swimming, and fishing with them. My cousin's house became my second home and we spent much time fishing at the nearby Teizan Bori canal, which was built 150 years ago. It extends nearly sixty kilometers from the Matsushima Bay in the north to the estuary of the Abukuwa River in the south.

After we moved to Natori, I frequented my cousin's house even more. When I was eighteen years old, I spent one summer working for another cousin, Hiromichi Sakurai, who, as I mentioned earlier, was found dead with his wife in his car. He needed an extra hand on their farm, and I stayed with and worked for him, picking watermelons and taking them to a local market. I would then play with my cousins in the afternoon.

Many of my friends commented on the horrifying videos they saw on American television, showing the black waves of the tsunami moving up the Natori River in the north, while swallowing and eating up much of the farmland and buildings, including my cousin's house, in the process. Now my cousin's old house, where I spent many summers, no longer exists. It only exists in my memory. My cousin, Tsutomu, also lost his entire collection of family photos and videos. The visual proof of their existence now exists only in memory as well.

On March 11, at 2:46 p.m., when the earthquake struck, Tsutomu was at work at his construction site. Ten years ago, the income he earned as a full-time farmer was no longer sufficient to support his growing family. He decided to work as a part-time construction worker for a contracting firm started by one of his friends who lived nearby. They themselves are also farmers, but still needed extra income to support their families as well. So they created their own construction company and my cousin decided to join them. However, the construction work is still not a steady job. Many part-time farmers in the company only get paid when local customers decide to build new sunrooms, fix the leak in their roofs, add new bathrooms, and so on. My father's living room was refurbished by this company, and my cousin did the actual work.

When the earthquake hit, Tsutomu's eldest son was working in Sendai, and his two younger daughters and youngest son were at school. His mother was away, running an errand. The two living souls in the house belonged to his wife Yoko, and the family dog. In the nearly thirty minutes from the time of the earthquake to the first wave of tsunamis to hit the coast, Yoko was busy getting things together to escape. She then realized that the huge waves were

hitting the house and tried to escape to the second floor, while the rising water rushed up every step of the stairs. When she reached the second floor, she instinctively closed all the windows. She said that trapping the air inside led to the entire house "being lifted," and it began to float, rotating slowly. She also realized that her family dog had somehow managed to enter the room. She and her dog floated for nearly an hour while trapped inside the room on the second floor. Right before the house stopped moving, she realized that the house had suddenly begun to rotate "vertically." She hung on to whatever she could to maintain her balance while still holding her dog. When the whole structure stopped moving, she maneuvered to get outside and searched for her cell-phone. Miraculously, the cell phone worked and she called her husband. Her shattered house was stranded in the middle of debris surrounded by water, and she spent a freezing night without dry clothes, holding her dog close.

My father's house and piano

When the earthquake hit, my father was sitting in his living room. He had just taken a bath after playing a recreational game with his elderly friends in the nearby park. The game is called gateball, which is a golf-like sport extremely popular among the older generations in Japan. The earthquake suddenly knocked down the 32-inch TV, and the tiny residential Buddhist shrine was about to crash to the floor. According to my father, the huge piano in the entry hall literally "walked" for about one meter. Two huge Japanese cabinets full of clothes that used to belong to my deceased mother and grandmother crashed to the tatami floor. If the earthquake had occurred in the night, my father would surely have been killed by the weight of the fully loaded cabinets.

Once the tremors subsided, he checked the safety of his long-time neighbor, Saito-san, and a new neighbor, Watanabe-san. Both of them responded that they were okay, though they also said that the insides of their houses were a complete mess. They also told my father that the radio had just warned about the danger of potential tidal waves in the coastal areas and residents were being asked to prepare for immediate evacuation.

My sister rushed to my father's house, located near the main artery extending from the Natori Japan Railway Station to the Natori Cancer Hospital, where many cancer patients receive life-saving treatments. Many cars and motorcycles could be observed heading toward the mountains, and drivers were shouting about the danger of the tidal waves coming this way. My father, sister, and neighbors decided to evacuate to the nearby evacuation center, which happened to be the gymnasium of Masuda Nishi Elementary School. My father brought with him bank deposits and family seal stamps (used as a signature for contractual purposes, called *Hanko* or *Inkan),* among other important documents.

This is the same school where, when my children were small, my wife and I enrolled them during the summer in order for them to learn Japanese culture and language. When they grew up, we enrolled them in another nearby

junior high school called Natori-Daiichi Junior High School. The gymnasium of this school was also designated an evacuation center for Natori residents who lived in the north.

My father, sister and neighbors waited there patiently until night fell. By this time, hundreds of people who had escaped tidal waves and lost their homes started to pour into the school gymnasium. My father and sister then decided to return to the house to see if the waves had reached his home. Realizing that the house was safe from the tsunami, they started cleaning up the place, while listening to a portable radio, which my father had bought nearly forty years ago, but is still operable. He lucked out, he said, because he had purchased a new set of batteries for the radio the previous week. He always listens to it when he goes to bed. My father and sister also discovered that there was no electricity, gas, or running water at the house. My father then brought out an old Japanese charcoal brazier from the back house and started to cook rice and boil water to make an instant miso soup to get warm. My father told my sister, "It's like a war-time experience."

Later in the evening, my cousin, along with his mother who is my father's younger sister, came over and told him that his wife was stranded somewhere in the middle of debris, alive with their family dog. My cousin soon left, picked up his three small children, and stayed at his friend's house. Meanwhile, his mother decided to stay with my father along with my sister.

Next early morning, when rescuers brought my cousin's wife to my father's place, everyone was there to greet her. It was an incredible moment of emotional eruption and joy. They also shared the sad news of many neighbors and friends whose whereabouts were still unknown.

It took another ten days to find a suitable apartment for my cousin's family. My cousin's mother decided to stay with my father. Another younger sister, who lived in Sendai, also decided to join and help out her older brother and older sister. My father says that now he is "being treated like a feudal king," as his two sisters help him cook and clean up the place, while sharing the whole life stories of their children and grandchildren. My father said that it was like "living in the same old house where we all grew up" in Aikuma town, which is also near Natori.

Nevertheless, their relationship has been all but peaceful or civil for a long time. When my grandfather died nearly twenty-five years ago, a huge inheritance, mostly farmlands, was left behind and a bitter dispute emerged among the six siblings. It continued for many years until the court was asked to intervene and decide on the equitable apportionment of the land estate and other inheritance. For many years, my father and his two brothers and three sisters did not talk to one another. None of the men wanted to break up the estate, insisting that it all be left for the deceased's widow, my father's older brother's wife, who supported and lived with her father-in-law until he passed away. It is generally accepted as the Japanese tradition that the eldest son takes care of his aging parents.

My grandmother on my father's side died when I was small, but my grandfather lived until he reached eighty-two years of age. His eldest son went to war and became part of the Japanese imperial army that reportedly killed nearly three hundred thousand Nanjin residents in 1937. He was able to survive the deadly war and returned to his home in 1945. But he carried with him many psychological scars, traumas, and tropical diseases, including malaria, and he passed away when I was small. Ever since he died, his wife, Taeko Kamo, had taken care of his husband's parents until they passed away. My father and his two brothers insisted that all the inheritance be left to the widow who had taken care of the aging parents and their grandchildren.

All the women insisted on their entitlement to the rightful share of the inheritance. Fifteen years ago, the death of the widow created the opportunity for all siblings to get together and share their emotive feelings against each other. The death of his sister's daughter also brought them together. Gradually, their wounds began to mend. Nowadays, they've become so close to one another that they hold an annual "brothers and sisters reunion" at the nearby *onsen* (hot spring). My father's two sisters moving in to help him out was a sign of their genuine concern and caring for the welfare of their sibling. If this earthquake could be said to have brought out any positive human element, I would say that it created the opportunity for the bonds and feelings of caring and loving that my father's siblings have for one another to solidify.

My old classmate in Sendai and his tears

Masaki Goto was my classmate in both the fifth and sixth grades in the Haranomachi Elementary School in Sendai. We were in the same class again three years later at Miyaginohara Junior High School. After graduation, I moved to Natori and had not seen him until five years ago when he suddenly emailed me, asking whether I was interested in participating in the first ever reunion of our elementary school classmates. In June of that year, twenty men and women who had shared the same class some forty years ago got together at a pub in Sendai. Since then, he and I have begun to exchange emails across the Pacific.

On March 13, two days after the earthquake and tsunami waves swallowed the coastal cities of northern Japan, he emailed me about the condition of the disaster areas he witnessed when he joined the rescue team and traveled to the Sendai Port. His house was badly shaken but remained structurally intact. As it was built in a hilly area, he was able to escape the tidal wave, though the deadly tsunami found its way nearly seven miles into the interior of the Wakabayashi District of Sendai City. His family has always lived in the same house, as far as I can remember.

He has had a very interesting, up-and-down career. He worked for a large multinational corporation and had to travel a lot. Many years of work-related stress, however, finally precipitated physical ailments and psychological distress and disorder. By his wife's urging, he decided to quit his

job in his mid-forties and came back to Sendai. He then began to observe his body and mind starting to "recover." But he says that he still needs to take "tons of medications and many pills" to combat the effect of corporate-related stresses. Nonetheless, he is finally free from all those work-related obligations and mental pressures.

After he decided "not to go to work" any longer, his wife started a beauty salon to support the family. He helped refurbish his house and partitioned it to create a new hair salon for his wife. Much to his surprise, her business has flourished. Meanwhile, he became more involved in local grassroots activities and community services. Last summer he worked as a member of the volunteer community patrol team during the annual Sendai festival. He has also enlisted as a volunteer fireman in his district.

While his house was still a mess, he decided to help out the survivors in Sendai Port areas that had been hit hard by the tidal wave. One afternoon, he and his men rescued two people from the wreckage. He was very proud of himself, while, at the same time, he observed numerous dead bodies lying on the street and inside wrecked cars and commercial ships. When he saw them, he said that tears began to trickle from his eyes. Once, the Sendai port was one of the most efficient ports in northern Japan, but it is completely destroyed and will take years to get back to normalcy. Today my dear friend still serves as a volunteer fireman, collecting bodies and searching for survivors in the hardest hit areas of Sendai. His latest email, nonetheless, has begun to express more concerns about multiple explosions at the Fukushima nuclear power plant and the potential effect of radiation leakages in Sendai and its adjacent cities and towns in the region.

Fukushima Nuclear Power Plant and Tokyo Electric Power Company (TEPCO)

It is ironic that the firm that has been accused of professional negligence in causing the death and injury of its workers and fined repeatedly for millions of dollars for falsifying safety reports was still allowed to manage and operate one of the most sophisticated and sensitive machineries that humankind has ever created. TEPCO, which operated the Fukushima Daiichi Nuclear Plants, has a long, checkered history. And the Fukushima Daiichi Nuclear Plant has had a series of radiation leaks.

In 2002, the TEPCO president was forced to resign after taking responsibility for suspected falsification of nuclear plant safety records. TEPCO was also suspected of twenty-nine cases involving falsified repair records at its nuclear reactors and had to stop operations at five reactors for safety inspections. In late 2006, the Japanese government ordered TEPCO to check previous data after the firm reported that it had found falsification of coolant water temperatures at its Fukushima Daiichi plant in 1985 and 1988, acknowledging that the tweaked information was used in mandatory inspections at the plant. In 2007, TEPCO also admitted that it had found more past data falsification.

Shortly before the March earthquake, TEPCO also admitted that it had failed to inspect thirty-three pieces of equipment inside the plant's cooling systems, including water pumps at the Fukushima plant. The company also missed safety checks over a ten-year period up to two weeks before the March 11 disaster and piled up spent uranium fuel rods inside the forty-year old nuclear facility. TEPCO also arrogantly turned down U.S. offers of help to cool the reactors shortly after the disaster and waited too long to pump dangerous seawater into the stricken reactors.

People also wonder why the Prefecture of Fukushima, which is in the northeastern region of Japan, houses six nuclear reactors whose sole purpose is to supply electricity, not to the residents or industries in Fukushima, but to the population, commercial interests, and industrial sectors in Tokyo and its neighboring regions some 150 miles down south. Fukushima also houses TEPCO's four additional nuclear reactors in its Fukushima Daini Nuclear Plant located ten kilometers south of the Fukushima Daiichi Nuclear Plant.

What's so surprising is the fact that these reactors at the Fukushima Daiichi Nuclear Plant are some of the oldest nuclear plants ever designed by General Electric. GE held the intellectual property rights of the nuclear power plant and supplied the reactor for Unit 1 along with Units 2 and 6, while Toshiba supplied structural materials for Units 3 and 5 reactors and Hitachi for Unit 4. All six reactors were based on the GE design and built by Kashima, another multinational Japanese corporation. With GE nuclear experts, the Unit 1 nuclear reactor was built in 1968, commissioned in 1971, and has been operating ever since, more than forty years.

It was supposed to be decommissioned last January after having operated for forty years. Nonetheless, Japan's Nuclear and Industrial Safety Agency (NISA) gave TEPCO an approval to extend its operation for an additional ten years. This is despite the fact that on February 26, two weeks before the earthquake, many grassroots organizations, including the Fukushima Environmental Protection Organization *(Fukushima Shizen Hogo Kyokai)* and the Green Fukushima of Future *(Midori no Mirai Fukushima),* submitted to TEPCO a petition to disclose information on numerous safety checks and inspections on the Fukushima plant that have been kept from the public.

With new nuclear technologies available, TEPCO continues to rely on the ancient plant to generate electricity. Just imagine how strange you would look if you were driving your automobile which had been designed some fifty years ago. It has no seatbelts or airbags because the installation of those safety conditions was not required in the original car design back then.

The safety of this old reactor plant design has been questioned since 1972. Japan is forbidden to engage in nuclear power research and Japan itself does not produce any reactors. In 2007, the GE-Hitachi joint venture company was created in the U.S. to collaborate on the development of the new generation of nuclear reactors. Nonetheless, existing Japanese nuclear plants have been based on designs produced by foreign companies, including GE.

The design flaw of the GE nuclear plant in Fukushima had already been pointed out by many nuclear experts, including the U.S. Nuclear Regulatory Commission (NRC), which said in 1972 that this design should never have been licensed. In 1985, the NRC said that there was a ninety percent chance that in a severe accident, the spent fuel-rod containment would fail. In 1976, three GE nuclear scientists also blew the whistle on the structural flaw of the nuclear design used to construct the Fukushima Daiichi Nuclear Plant, stating that, in case of disaster, the practice of putting the spent fuel rods pool on an upper floor of the reactor building, not at a ground level, would make it nearly impossible to fill it with the water to cool and stop them from melting. They were later forced to resign for their public statement.

On March 16, one of the three scientists said on CNN with tears in his eyes that the condition of the Fukushima plant was worse than what we had warned nearly forty years ago. The difficulty of cooling the fuel rod and the breach of its containment was evident, because for the first couple of days after the earthquake, TEPCO was using Japanese helicopters to scoop seawater, dumping it from the air to try to fill the pool at the Fukushima plants. The effort was obviously unsuccessful and the lack of cooling water facilitated the continued meltdown of fuel rods and released the steam that contained dangerous radioactive substances into the atmosphere. Meanwhile, two weeks after the earthquake, GE publicly stated that the design was not flawed and it has been used in the construction of twenty-three of 104 nuclear reactors currently operating in the United States.

Governmental manipulation of Japanese media and the corporate complicity

From day one, the Japanese government and TEPCO have efficiently operated to suppress the transmission of crucial information on the status of nuclear reactors and the safety of spent-fuel rods at Fukushima Daiichi Nuclear Power Plant. As results of the coordinated corporate and governmental efforts, the Japanese and international communities were not given the correct information about the level of radiation leaks in Japan and potential contamination of regional residents in various prefectures.

First, the foreign media were effectively shut off from attending the government press conferences, and much crucial governmental information was not released to the international media. The Japanese TV and newspaper media are also complicit in their failure to ask TEPCO engineers and government officers any of a number of emerging questions about the status of nuclear reactors.

TEPCO is the largest corporate sponsor of TV and radio programs and newspaper advertisements in Japan. It is also important to realize that the main sponsor of the ruling Democratic Party of Japan (DPJ) has been the Federation of Electric Power Companies of Japan (FEPC), in which TEPCO continues to play a major political and financial role in influencing policy in Japan's nuclear programs. Consequently, TEPCO successfully took charge of the Japanese corporate media and influenced the release of information on the status of the Fukushima power plant.

Chief Cabinet Secretary Yukio Edano has been the main spokesman for the Japanese government and provided crucial information of radiation emissions supplied by TEPCO scientists. Edano has been insisting that the situation at the Fukushima plant has been steadily improving and that there is no "immediate" effect of radiation exposures, while deliberately ignoring the longitudinal effect of radiation exposures to the Japanese public. Even after the hydrogen explosion of Unit 1, Edano said that the nuclear reactor was intact, and there was no sign of significant radiation leaks in the plant, which was later found to be false.

Many of his Edano's of physiological effects of radiation were reportedly based on physiological consequences of the radiation impact upon healthy adults, not on small children, infants, or pregnant women who will be adversely affected by the exposure to radiation.

My brother-in-law who lives in Koriyama in Fukushima, sixty kilometers west of the Fukushima Daiichi Nuclear Power Plant, asked me to purchase and send him a Geiger counter in the U.S. so that he can correctly measure the level of leaked radiation in his area. Nearly all radiation instruments have been sold out in Japan. Having no confidence in any reports issued by TEPCO, the Japanese government, or the Japanese media, he decided to send his two daughters from Koriyama to my house in Santa Cruz, California, until an arrangement is made for their new school transfer in another Japanese prefecture. My sister in Sendai is also extremely skeptical of the government reports on the level of daily radioactive activities in the city and surrounding regions.

Despite the government's effort to downplay the extent of radiation leaks, Japanese people are more intelligent than the government expects them to be and are clearly aware of the government's maneuvers of the Japanese corporate media in the censorship of crucial information. Many progressive people in Japan learned very hard lessons from their failure in not detecting lies or inaccurate information on the war. Japanese historians have estimated that several million Japanese citizens were killed by the misinformation given by the Imperial General Headquarters during WWII.

Foreign nuclear experts were also skeptical of the Japanese government reports and decided to conduct their own independent investigations. For example, they have issued very different interpretations on the effect of radiation leaks in Fukushima. Immediately after the explosion, the International Atomic Energy Agency (IAEA) issued the evacuation warning to Japanese residents who live within an 80 kilometer radius from the Fukushima nuclear plant. Even the Nuclear Regulatory Commission (NRC) Chairman Gregory Jaczko warned that the nuclear meltdown and subsequent contamination was "extremely high" in the Fukushima nuclear plant and much wider evacuations were absolutely necessary. On March 18, the NRC also warned that the containment pool at Unit 4 had already ruptured and could approach the

apocalyptic stage unless there were immediate strategies to cool down the spent nuclear fuels. NRC scientists also recognized the Japanese government's failure to provide accurate information and timely warnings to its own citizens.

The Japanese government and TEPCO have mobilized their resources to pacify the public and counteract any negative foreign or domestic publicity about the danger of the radiation leaks. The government even asked Emperor Akihito to visit the evacuation centers and urge the people to pull together in the aftermath of the earthquake and tsunami, though he failed to mention the effect of the nuclear radiation and radioactive leaks from the Fukushima plant.

The Japanese government has also been quite busy in its legal maneuvers and in trying to change the legal standard of nuclear-related government regulations. The government first changed the scale of the earthquake magnitude from 8.9 to 9.0, and such a change was only applicable for the extraordinary earth-shaking event. The Japanese government has then decided to allow it for the first time in its history. The international independent earthquake experts have estimated the magnitude of the March 11 earthquake to be a mere 8.3 or 8.4, much less than what has been reported in the Japanese media. The special application of the extraordinary scale will likely downplay the man-made components of catastrophes and help replace them with the natural disaster of earthquake and tsunami. This substitution will further help exonerate the extent of the man-made components and the criminal and financial liability of both the Japanese government and TEPCO in the future.

The Japanese government also changed the upper limit of workers' nuclear exposures from 100 millisievert to 250 millisievert, elevating the legal limit to extend the activities of the workers at the nuclear plant. For the agricultural crops, the Japanese government also tried to change the legal limit of contamination, but was persuaded to maintain the pre-earthquake standard.

The most unique effort to pacify the public was the use of cartoons, in which the boy-like character called "Pluto-kun" was used to dispel fears of the effect of plutonium produced by the nuclear power plant in Japan. Pluto-kun explains that he is not a monster and wants the people to understand how peaceful and safe he truly is. He says that he will not pose any danger as long as people use him peacefully and will be a reliable friend who can provide an endless source of energy to Japanese people for many years to come.

Just like my brother-in-law, sister, and many progressive thinkers, independent and young freelance Japanese journalists have also been extremely critical of the Japanese government and its information on the radiation leaks and contamination of regions close to the Fukushima Plant. Their consistent inquiries to TEPCO scientists and press spokesmen finally revealed that the Japanese government agreed to TEPCO's requests to dump more than

three million gallons of radioactive water into the Pacific Ocean on April 4. The decision was carried out without any consultation of the fishing industries, local authorities, or foreign governments of adjacent countries in the region. The Japanese government also failed to take into critical consideration the possible violation of international law on environmental pollutions.

Legally speaking, the mass dumping of highly radioactive water into the Pacific Ocean is a clear violation of the 1972 Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matters. The act of this illegal mass dumping of highly radioactive water has also shifted the perception of Japan in the world community. The illegal dumping transformed the position of Japan from the victim of inevitable, naturally caused catastrophes to the criminally liable nation-state which knowingly released tons of toxic water into the ocean, causing potential massive contaminations of oceanic resources and causing health hazards of their consumers in the world.

Last summer, I sponsored Dr. Sunsul Park from South Korea and supported his research for one year at UC Santa Cruz. He has since told me that he is amazed by the extremely pacified responses of Japanese people to this nuclear disaster. He says that if the same nuclear disaster would have happened in Korea, people would have engaged in massive demonstrations to pressure the government and the power company to rectify the situation by any means necessary. Many progressive scholars and grassroots activists would be swarming the residence of the top CEOs and government bureaucrats to demand the immediate solution to the problem.

In Japan, up until now, the collaborative effort of the government and the corporate media has successfully eradicated the potential tsunami of public condemnations and protests. The near-perfect control of the Japanese corporate media may not last forever, just like the complete media control by the Imperial General Headquarters during WWII. Independent Japanese journalists and critical thinkers like my brother-in-law and sister have begun to rely on the use of social networking devices like Twitter and Facebook to mobilize grassroots movements.

In the near future, it is possible that computer-literate populations may bring about the necessary changes to the traditional top-down system of media informational dissemination. What happened in the social networking revolution and resultant mass demonstrations in Tunisia, Egypt, Yemen, Syria, and Thailand may happen in Japan. This new nuclear disaster may bring about much needed changes in Japan's democratic movements.

International lens on the survivability of the nuclear industrial complex

A French nuclear fuel company, Areva, produces the uranium-plutonium mixed oxide (MOX) fuel, so called, used at the Unit 3 reactor in Fukushima. Areva has been commissioned by TEPCO and other Japanese electric power companies to process MOX fuels. Its use has been much criticized by nuclear experts, as it is considered one of the most dangerous nuclear fuels because

of its lower melting temperature. The phenomenon of fuel melting due to the failure to cool it can facilitate the release of plutonium into the environment, threatening public health and increasing the chance of developing fatal cancers. Immediately after the earthquake, the French government decided to send five nuclear experts to Japan to offer help with the crisis at the crippled Fukushima plant. President Sarkozy also visited Tokyo on March 31, along with Areva CEO Anne Lauvergeon to meet the Japanese officials who offered the technical expertise in disposing the contaminated water that began leaking into the ground and the sea. Their visit is significant because nearly eighty percent of French electricity is generated by French nuclear power plants.

Any significant disaster may threaten the French government's nuclear policy in the future. Meanwhile, international communities have been watching the Fukushima disaster, as if it were an American and French nuclear disaster taking place on Japanese territory. The Government of India, which has been negotiating with GE for the construction of nearly 150 billion dollars worth of nuclear plants, is now reconsidering the agreement and has decided to redraft its own governmental nuclear program. Up until now, GE's nuclear investment had been greatly promoted by the American government as part of its foreign policy to export its proprietary nuclear technology to the overseas market, especially in countries in the Third World.

The current contractual agreement signed between TEPCO and GE, in the event of disasters at the nuclear plant, places the liability squarely on TEPCO as the operator of the nuclear plant. As is regularly practiced in nuclear industries around the world, TEPCO also carries insurance that amounts to over one billion dollars in coverage, with the guarantee that the Japanese government pays for the remainder of any future compensation.

The only exception from this binding responsibility may be that the original design of the nuclear plant must be proved flawed, thus shifting the liability to the designer of the nuclear plant, GE. Upon the showing of proof, GE may be liable for the payment of billions of dollars to compensate for millions of disaster victims in Japan and other affected people in different parts of the world. Regardless of the legal strategies or maneuvers, it is possible that TEPCO and the Japanese government may bring a lawsuit against GE, which drafted the original design of the nuclear power plant in Fukushima.

Ever since the earthquake and tsunami led to the shutdown of the nuclear plants in Fukushima, the American government has been extremely eager to offer logistical help, though the initial offer was rejected by TEPCO. Because of TEPCO's inability to deal with the crisis at hand, the Japanese government stepped in and took charge of much of the publicity efforts on the disaster and instituted new operation protocols. Many people believe that the offer of help from the U.S. government and its military personnel stationed in Japan comes from their genuine concern about the health and social welfare of people in Japan. Nonetheless, the potential liability of GE and the nuclear policy promoted by the U.S. government also make many people feel suspicious of the sincerity of their original motives.

Meanwhile, "Operation Tomodachi" (Operation Friends) mobilized fourteen U.S. Navy ships, more than one hundred aircrafts, and nearly twenty thousand U.S. service members stationed in Japan to provide much needed support to disaster victims in remote areas and islands. Military nuclear experts have also been invited to join the emergency committee to deal with the breach of both fuel containments and possible nuclear core reactors at the Fukushima nuclear plant.

Certainly TEPCO, GE, Avera, and both the Japanese and American governments expressed their concern over not only the extent of potential nuclear contaminations in the region in Japan and other countries around the world, but also possible legal liability, economic loss of corporate profits and revenue, and potential compensatory payment to millions of disaster victims. The radioactive contamination could become so severe that, just like the Four Corners area of the Navajo Nation and the Black Hills of South Dakota are designated as "National Sacrifice Areas," some of Fukushima and its adjacent regions might become Japan's national sacrifice region due to permanent environmental damages through radiation.

A nuclear power plant's main purpose is to boil water and create steam, which is then channeled into turbines whose high-speed spinning motion generates electricity. In other words, the primary purpose of a nuclear power facility is to boil water. This time, the cost of burning the fuel rods to boil water was extremely expensive, as it also collaterally burned the economic and financial foundation of millions of people's livelihoods. Their culture, their regional identity, and people's connections to ancestral lands and memories have already been destroyed by the forced evacuations.

It is also important to mention that the TEPCO nuclear plant was not built in the middle of the Tokyo-Shinjuku area, but in the tiny towns of Okuma and Futaba in the Futaba District of Fukushima Prefecture. In a country without many natural resources, the construction of nuclear power plants was sold to the public as a matter of national security, as well as a necessary and essential government program to secure future energy sources for millions of city dwellers and support commercial and industrial sectors in metropolitan areas.

Fukushima became the ideal and preferred site for the construction of nuclear power plants because of its high unemployment, poor economy, and its record of low educational achievement and competencies among younger students, standing at the bottom, only better than Okinawa. Though the aforementioned issues of corporate legal liabilities are important, epic natural disasters could result in apocalyptic radiation leaks with permanent and horrific effects in Japan and in the world, and make GE's liability issues wither in comparison.

Kamikaze, nationalism, and the "Hyper-Rescue" team

In the past, when a collaborative project between the state government and giant private corporations failed and led to a national disaster like an unwinnable war, the Japanese government exhibited the tendency to promote the nationalistic sentiments to call for sacrificial contributions from individual citizens to help save the nation from the disaster. Currently, in dealing with the nuclear crisis at the Fukushima power plant, a special group called the "Hyper-rescue" team of the Tokyo Fire Department was summoned in order to restore normalcy at the crippled nuclear power plant in Fukushima. The top bureaucrat of the fire department made a patriotic speech imbued with a passionate, nationalistic tone, asking the members to sacrifice themselves to deal with the crisis "for the sake of the country *(kokumei o kakete)*."

His strong nationalistic expression resonates with many speeches given by military government leaders to many patriotic soldiers, including young Kamikaze pilots at the end of WWII. As the Japanese imperial force engaged in predatory military actions against other Asian neighbors in order to secure material, natural, and human resources to feed Japan's military-industrial complex and its modernization, an army of soldiers was recruited from all over Japan, Korea, and Taiwan to participate in the imperialist project, which ultimately resulted in the death of millions in the imperial process. At home, nearly 700,000 civilians were incinerated by America's aerial raids over two hundred cities, towns, and villages from late 1944 to the morning of August 15, 1945 when the Japanese government finally signed its complete, unconditional surrender to the U.S. and its allied forces.

In 1942, at the age of thirteen, my father was conscripted to work in a Hitachi-owned bomb factory in Mito, a sleepy coastal town north of Tokyo. His job was to weld wing-metals to bombs. He began to talk about his war experience in detail only recently. He painfully talked about his attempt to help resuscitate his roommate whose stomach was blown away by bomb shrapnel. He was once so hungry that, during a U.S. air raid, instead of running to his regularly assigned bomb-shelter, he ran towards a potato field, lay down low, and started to use his fingers to search for potatoes to eat. He soon realized that he could have made a life-threatening mistake when he saw many telephone poles being chopped into pieces like match sticks by the sharp shrapnel of exploded bombshells.

He said his life in the Hitachi dormitory was a hell, as he was beaten every day by older roommates for no reason. It is ironic that nearly seventy years later, my father found himself in a similarly helpless situation, in which the nuclear reactor built by the same company, Hitachi, is endangering his life once again.

The nationalistic rhetoric given by TEPCO CEOs in encouraging their employees, rescue workers, and subcontracted workers to make collective personal sacrifices for the sake of the company, and ultimately, the Japanese people, sounds extremely hollow. In past nuclear accidents, the majority of the workers exposed to radiation have been subcontracted workers who were hired for brief periods to do the most dangerous work at the nuclear plant. These subcontract workers are called "*Genpatsu* Gypsies" (nuclear gypsies), and they move from one nuclear plant to another throughout the year, making up eighty-nine percent of employees in the industry and receiving more than ninety percent of all radiation exposure.

Many of them come from *Burakumin* and other ethnic minority backgrounds and lower classes who have difficulties in finding jobs in more stable primary labor markets. These workers are recruited from predominantly minority areas and city slums such as Sanya Ward in Tokyo, Kamagasaki in Osaka, as well as *Burakumin* residential areas throughout Japan. With more jobs at nuclear power plants in recent years, additional workers, including poor farmers, fishermen, day laborers, and even homeless have been recruited to work as temporary employees, to supplement their incomes or simply to get by. They find themselves working at dangerous nuclear fuel facilities, such as waste burial and storage facilities, mopping up radioactive water, scraping out shells and sludge attached to drains, inspecting and repairing operative equipment, and removing radioactive dust from mechanical parts inside nuclear reactors. They are attracted by high daily wages and sent into the plants with hardly any knowledge of the danger of radiation. The fragmentation of subcontract workers and their diverse backgrounds also contributed to the utter failure to form a union to improve their working conditions. In many plants, subcontract workers are required to make formal apologies to the nuclear power company if they get injuries. They have no medical guarantees for their job-related illnesses or injuries.

A similar scenario is played out for "foreigner squads" who are sent from the U.S. by GE and Westinghouse, another nuclear plant manufacturer, to work at the plants they built in Japan. It has been reported that Americans subcontracted by GE to work at the Fukushima plant have been largely African-American.

It is ironic that those who are asked to restore the operation of the nuclear power plant by the leaders of the company and the Japanese government officials who use the nationalistic and patriotic rhetoric and encourage them to sacrifice even their lives on behalf of the company and, ultimately, millions of Japanese residents are the very people who have been subject to social and economic discrimination in society. The ultimate fate of TEPCO, the lives of millions of Japanese residents, and even the survival of nuclear industries in Japan and elsewhere now depend on the sacrifices of nameless subcontract workers who themselves are victims of the very systems that they are asked to rescue.

Libya and depleted uranium ammunitions

While those subcontract workers were struggling to restore the nuclear power plants and battling the effects of radiation at the nuclear plant

site in Fukushima, it was reported that in the Mediterranean Sea, French jet fighters had just taken off on the nuclear aircraft carrier, *Charles André de Gaulle,* named after the renowned French president, to bomb the tanks, armored vehicles, and military command centers inside Libya. American and British jet fighters also joined the aerial assault and attacked the Libyan army with special, anti-tank depleted uranium (DU) missiles, spreading the radioactive materials all over the battleground and adjacent areas.

While Japan's subcontract workers were working frantically at the nuclear plant to save millions of lives from potential radioactive contamination, NATO forces were trying to neutralize Libyan armies in the name of democracy, while spewing the deadly depleted uranium and its radioactive dust, potentially endangering millions of lives over the wide regions of Libya. The armor-piercing ammunitions were made of depleted uranium, which is a radioactive and toxic waste.

In the aftermath of the first Gulf War in 1991, both U.S. and British jet fighters dropped more than 290,000 kilograms of depleted uranium, thereby contaminating military equipment, food and water, soldiers, residents, and the soil on the battlefields of Saudi Arabia, Kuwait, and southern Iraq. Today, many veterans and civilians have been exposed to DU contamination and are suffering from serious health problems, including kidney damages, cancers of lungs and bones, non-malignant respiratory disease, skin disorders, neuro-cognitive disorders, chromosomal damage, birth defects, among many other diseases and sicknesses.

The governments of the United States and Great Britain, fully aware of the potential danger and highly toxic nature of radioactive contamination to people in the areas for many years to come, nonetheless continued to manufacture and employ the dangerous ammunitions against foreign enemies on foreign soils. In 1999, the UN sub-commission determined DU hazardous enough to call for an initiative, banning its controversial use worldwide. Nonetheless, the initiative was blocked by the U.S. government. In Basra, Iraq, numerous studies showed the exponential increase of birth defects in the region, from eleven per a population of 100,000 in 1989 to 116 per 100,000 in 2001. Similarly thirty-four people died of cancer in the area in 1988, while in 2001 there were 603 cancer deaths.

Dr. Jawad Al-Ali, a British-trained oncologist, found similarities to the birth defects that followed the atomic bombings of Hiroshima and Nagasaki after 1945. The most dangerous weapons, with the potential to cause serious health and reproductive hazards for many future generations, have always been used against people of color and of non-European origin, in non-European regions.

If massive radiation leaks spread over northern Japan, what happened in Basra, Hiroshima, and Nagasaki will await a future generation of Japanese children who will be adversely affected by the radioactive contamination found in mother's milk, drinking water, baby food, soil, and the atmosphere.

Last remarks and Haitian President and the Tsunami of love

One week after a deadly tsunami swallowed many of the cities and towns on the northeastern coast of Japan, another powerful tsunami hit the coast of the Island of Hispaniola in the Caribbean nation of Haiti. On March 18, former Haitian President Jean-Bertrand Aristide finally returned to his home country and was greeted by tens of thousands of enthusiastic Haitian supporters who welcomed him at the airport and followed him to his residence. "Tsunami of love" was the word used by Aristide to capture the tidal wave of warm welcomes expressed by the Haitian people. In 2004, President Aristide was kidnapped by a U.S. special forces unit and dropped off in the Central African Republic. Despite the U.S. threats against him and his family, Aristide finally returned to Haiti with the support of actor Danny Glover, lawyer Randall Robinson, U.S. representative Maxine Waters, and many other humanitarian activists and Haitian supporters in the U.S. and around the world.

The name of his political party is called *Lavalas,* which also means the "tsunami" of a cleansing flood in Creole. This time, the huge tidal wave of love and affection has literally poured down out of the Haitian streets and slums and stormed out of the city toward the airport and his residence, with the expectation that former President Aristide will help reconstruct the earthquake-devastated country of Haiti. Haiti suffered the deadly earthquake on January 12, 2010 and more than three hundred thousand people died. More than ten thousand Haitians have also lost their lives to the recent cholera epidemic which was ironically brought by United Nations peacekeeping members who came in to provide assistance to Haitian people.

What Former President Aristide plans to accomplish is quite similar to what the Japanese people and its leaders must do in their effort to reconstruct the socioeconomic foundation in northern Japan. Many volunteers, American military forces and personnel, and rescue teams sent by many other countries poured their "tsunami of love" and support on the victims in northern Japan.

The question still remains whether or not Japan's new tsunami, after having killed nearly thirty thousand people and still threatening millions of Japanese residents through a potential nuclear meltdown, may be morphed into the tidal wave of love, affection, and the goodwill of many international organizations and governments.

Until then, the fates of the Japanese people, TEPCO, the government of Japan and other crucially connected organizations such as GE and Areva are hanging by a thread, all hoping that this tragedy will not lead to an even greater disaster.